County of Fairfax, Virginia



To protect and enrich the quality of life for the people, neighborhoods and diverse communities of Fairfax County

REQUEST FOR INFORMATION (RFI) National Capital Region (NCR) EMERGENCY SERVICES INTERNET PROTOCOL NETWORK AND NG9-1-1 CORE SERVICES

To: All Interested Parties

Date: July 2, 2015

Title: National Capital Region (NCR) Emergency Services Internet Protocol (IP)

Network (ESInet) and NG9-1-1 Core Services (NGCS)

IN RESPONSE, PLEASE REFER TO RFI #2000001681

THIS IS A REQUEST FOR INFORMATION (RFI) ONLY. This is not a procurement and no award or pre-qualification will be made as a result of this RFI. Respondents are advised that neither Fairfax County nor the National Capital Region (NCR) will pay for any information or administrative costs incurred in response to this RFI; all costs associated with responding to this RFI will be solely at the interested party's expense. Not responding to this RFI does not preclude participation in any future Request for Proposal (RFP), if any is issued. Based upon the results of this request, the County, in cooperation with the NCR, will either issue a solicitation or explore other alternatives.

Attachment A provides information that is of interest for a National Capital Region (NCR) ESInet and NG9-1-1 Core Services solution. The attached response form must be received no later than 2:00 P.M. EST on August 10, 2015, at the Department of Purchasing and Supply Management, 12000 Government Center Parkway, Suite 427, Fairfax, Virginia, 22035. Submit one (1) original and five (5) copies of the response form. Responses received after the time and date specified above will not be considered.

Any literature to include product data sheets, brochures, compact discs or DVDs or other material that describes the products and/or services will also be accepted. Minimum of six (6) copies of each will need to be supplied.

If you have questions or comments, please direct them to the Contract Specialist, Jamie Pun at (703) 324-3653 or via e-mail at <u>ji.pun@fairfaxcounty.gov</u>, before August 3, 2015.

Department of Purchasing and Supply Management

12000 Government Center Parkway, Suite 427

Fairfax, VA 22035

Website: www.fairfaxcounty.gov/dpsm

Phone: 703-324-3201, TTY: 1-800-828-1140, Fax: 703-324-3228

County of Fairfax, Virginia



To protect and enrich the quality of life for the people, neighborhoods and diverse communities of Fairfax County

DEPARTMENT OF PURCHASING AND SUPPLY MANAGEMENT 12000 Government Center Parkway, Suite 427 Fairfax, Virginia 22035

Attention: Jamie Pun, VCO, Contract Specialist II

Response to: RFI #2000001681; National Capital Region (NCR) Emergency

Services Internet Protocol (IP) Network (ESInet) and NG9-1-1 Core

		Services (I	NGCS)		
PLEA	SE PRO	OVIDE THE	FOLLOWING INFORM	IATION:	
CHE	CK:	YES	INTERESTED	NO	NOT INTERESTED
1.			s of Organization:		
2.	Conta Phone Fax N	ct person- De Number: _	aytime Phone Number		
3.	knowl	edge. No inf			and only for intended recipients' tor in discussions connected to it
4.					spondent may provide should be unty will not release same.
5.	Respo	ondents are	requested to provide in	formation as	requested in Attachment A.
			Dani	ortmant of Di	urchasing and Supply Management

12000 Government Center Parkway, Suite 427 Fairfax, VA 22035

Website: www.fairfaxcounty.gov/dpsm Phone: 703-324-3201, TTY: 1-800-828-1140, Fax: 703-324-3228

BACKGROUND:

Fairfax County, on behalf of the National Capital Region (NCR), is seeking a vendor or vendors with the capability to provide regional capabilities for an Emergency Services Internet Protocol (IP) network (ESInet) and Next Generation 9-1-1 (NG9-1-1) Core services (NGCS) that are in compliance with National Emergency Number Association (NENA) i3 technical and functional standards.

The existing 9-1-1 legacy network infrastructure and associated equipment in the NCR is dated and reaching end of life. The legacy technologies of the traditional time division multiplex (TDM) carrier network limit the capabilities of 9-1-1 service in the NCR and the incumbent carrier is intent on transitioning service off the legacy selective router network to more sustainable and IP-based capabilities as soon as practicable. Public safety answering points (PSAPs) in the NCR, which combined handle over 5 million 9-1-1 calls annually, are limited in the amount and types of information that can be gathered through the network about an emergency call and the caller. PSAPs are restricted in their ability to transfer calls with automatic location identification (ALI) to some neighboring jurisdictions due to lack of interoperability in the legacy network supporting call delivery systems.

As citizens increasingly trend toward wireless and mobile communications, it becomes imperative that PSAPs have a plan for updating 9-1-1 routing and data delivery platforms. Consumers are using powerful mobile devices with advanced applications that are able to quickly locate the handset, sharing information such as photos and videos, and for communicating with one another through multiple means such as text messaging, video chat, and voice calls. The consumer's expectation is that their local emergency services providers have similar capabilities for communicating to 9-1-1 callers and in collaborating with neighboring jurisdictions. Unfortunately, this is not the case with today's Enhanced 9-1-1 (E9-1-1) systems in the NCR. Recognizing that today's E9-1-1 is supported by outdated legacy technology, the need exists for the NCR PSAP partners to assess regional 9-1-1 systems and associated governing business processes to plan a transition to NG9-1-1 systems.

NG9-1-1's foundation is a standards-based, IP network enabled with advanced applications and systems that provide improvements in call processing capabilities, information sharing, and system resiliency. PSAPs may receive, through an NG9-1-1 network, more robust descriptive information about a call, caller, and their location and share that information directly with first responders. The constraints of legacy architectures may be eliminated, allowing for multi-jurisdictional support in answering 9-1-1 calls across multiple PSAPs during a catastrophic event. Intelligent routing platforms in the Core shared services of the new IP network can be provisioned with customized routing rules that enable back-up scenarios providing PSAPs with flexibility that was previously unattainable.

The NCR presents a unique set of requirements due to the multi-state alliance as compared to other regions in the United States; however, a consistent mission for enhancing public safety and improving incident response is a common over-arching goal. The combination of regional preferences, operational requirements, and technical specifications support the process for soliciting industry input to implementation approaches through this RFI with Fairfax County as the sponsor agency.

OBJECTIVES:

As the NCR considers the deployment of a regional ESInet, there are several high-level objectives, listed below in no particular order of priority:

- Industry standards-based solution design
- Use of existing networks wherever possible, such as NCRnet, Network MD, and DCnet
- Supplement and improve existing networks, if possible, to operate in a public safety-grade environment on a 24 hours a day, 7 days a week basis (24/7)
- Customized solution to meet the region's operational requirements, not a "cookie cutter" approach
- Increased individual and regional capabilities
- Equitable cost models that are capable of allocation according to regional jurisdictional structures
- Multiple technical solution design options for flexibility (both owner-operated and hostedfacility ESInets) and scalability for potential expansion beyond the immediate NCR region within Maryland and Virginia
- Ability to interoperate within the region while allowing for individual member migration
- Technical solution that enables sharing of data and facilitates regional response and interoperability
- Security, stability and reliability of solution
- Services contracts allowing jurisdictions to have direct relationships with the vendor

Fairfax County, on behalf of the NCR, is interested in products and services to support implementation of a regional ESInet and the key NGCS that support location validation, geospatial call routing, and spatial interfaces with the NGCS for integrated, systematic geo-spatial data updates. Fairfax County is interested in obtaining rough order of magnitude (ROM) costs for respective products, and managed network services for implementation and 24/7 network operations support. Respondents are asked to provide detailed information as requested below.

A. COMPANY PROFILE

Please provide a brief overview of your company, including but not limited to your business lines, market territory, NG9-1-1 experience and networks in operation, and participation in any NG9-1-1 standards groups.

B. NG9-1-1 VISION

Please provide a statement on your NG9-1-1 vision.

C. SOLUTION(S) / SERVICES

The NCR is exploring an integrated, hybrid i3 system design for the PSAPs in the Metropolitan Washington Area Council of Governments (MWCOG) footprint. The solution would provide options for procurement of i3 core systems by a jurisdiction (owner-operated) as well as procurement of an i3 services model (hosted). The owner-operated solution would be hosted at the local jurisdiction and maintained by the vendor, while the vendor-hosted solution may be hosted by the vendor in geographically diverse data centers with at least one node preferably located in the NCR. The two solutions must be integrated and interoperate seamlessly. Please describe how you may support such a solution. (A conceptual diagram of the recommended solution may be found in Appendix A.)

Please describe your company's ability to provide turnkey managed network services for each PSAP and access to hosted NGCS and locally-owned NGCS. (A list of the PSAPs and potential host locations with position counts is provided in Appendix B.)

Please describe the recommended host site locations for a vendor-hosted solution. At a minimum, please describe the data center's Telecommunications Industry Association (TIA)-942 Tier designation, security features, and telecommunication facilities capabilities. Please include your reasoning for selecting the recommended facilities.

Please provide information relating to your solution(s), as noted below.

- Describe what, if any, differences exist between your vendor-hosted and client-hosted/standalone solutions, and the pros and cons of each.
- Describe how your solutions may interoperate with neighboring ESInet solutions.
- Identify any equipment required to be deployed in your vendor-hosted and client-hosted/standalone solutions.
- For your envisioned ESInet solution, describe your solution / product / services or how they are provisioned for the NGCS components listed below. For each NGCS component, describe how the component will meet a 99.999% availability requirement and your recommended location where the component should reside.
 - Legacy Network Gateway (LNG)
 - Legacy Selective Router Gateway (LSRG)
 - Border Control Function (BCF)

- Location Database (LDB)
- Emergency Call Routing Function (ECRF)/Location Validation Function (LVF)
- Emergency Services Routing Proxy (ESRP)/Policy Routing Function (PRF)
- Describe your solution's redundancy and diversity.
- Describe the security features of your solution, including physical security of facilities, personnel, and equipment to logical security of the network, servers, and applications.
- Describe your solution(s)' scalability, including the ease and speed to scale network capacity.
- Describe your requirements for interfacing with the NCRnet for the interchange of GIS, network management communications, and auxiliary data.
- Describe performance metrics and service level guarantees.
- Describe your strategy for migrating from the existing legacy selective routers to the ESInet. Please include an estimated time to decommission legacy selective routers and ALI database functions.
- Describe how legacy selective routing and ALI services fees can be eliminated in the most safe and yet expeditious manner.
- Provide a high-level timeline for implementation (non-binding), based solely on information provided herein.
- List all billable elements of your solution, and any inter-related elements, such as customer or technical support.

The NCRnet is a fiber-optic network that connects MWCOG members and enables data interchange between agencies. There is a mix of 10 gigabit (Gb) and 1 Gb links. The rings are typically 10 Gb and the single-fiber links are 1 Gb. To further utilize the regional asset, the region would like to explore using NCRnet to augment the regional ESInet by supporting auxiliary non-mission-critical services. One such service would be to use the NCRnet as a backup path for network management and traffic monitoring. Additionally, the region would like to explore having NCRnet be used as a path of last resort for 9-1-1 calls and NG9-1-1 services in the event of a complete ESInet failure. Please describe how your solution would enable such a service.

The region believes that a regional Spatial Database Management System (SDBMS) is required to provide a centralized authoritative GIS database. The SDBMS would receive updates from local jurisdiction databases via web services, as well as provide the tools and processes to meet the data integrity and data quality needs of the core GIS data layers for NG9-1-1. It is envisioned that the SDBMS would provide Spatial Interface (SI) updates to the ECRF and LVF. Please describe your solution.

D. STANDARDS

Adherence to applicable standards, including those listed below, cannot be overstated.

If there are other applicable standards for your solution(s), please note.

Please provide details regarding any standards listed below for which your organization will not fully comply or list any standards that you do not believe apply to your solution. In your details, please explain your positioning.

Number	Title								
	NG9-1-1 Documents								
APCO/NENA 2.105.1201x (in development)	NG9-1-1 Emergency Incident Data Document (EIDD)								
NENA/APCO-INF-005	Emergency Incident Data Document (EIDD) Information								
NENA 02-010 v9	Standard Data Formats For ALI Related Data Exchange, MSAG & GIS								
NENA 08-003	Detailed Functional and Interface Specification for the NENA i3 Solution – Stage 3 (Soon to be renamed NENA-STA-010.2-201X)								
NENA 08-506	NENA Emergency Services IP Network Design for NG9-1-1 (ESIND) (under revision)								
NENA 57-750	NG9-1-1 System and PSAP Operational Features and Capabilities Requirements								
NENA 70-DRAFT	Standards for the Provisioning and Maintenance of GIS data to ECRF/LVF								
NENA 71-001	NENA Standard for NG911 Additional Data								
NENA 71-501	Synchronizing GIS System Databases with MSAG & ALI								
NENA 71-502	Overview of Policy Rules for Call Routing and Handling in NG911								
NENA STA-003	NG911 Policy Routing Rules								
NENA-INF-003.1-2013	NENA Potential Points of Demarcation in NG9-1-1 Networks Information Document								
NENA-INF-008.2-2014	NG911 Transition Plan Considerations								
NENA-INF-009.1-2014	Requirements for a National Forest Guide								
NENA-STA-004.1-2014	Next Generation 911 (NG911) Civic Location Data Exchange Format (CLDXF)								
NENA/APCO-REQ-001.1-	NENA/APCO Next Generation 9-1-1 Public Safety Answering Point								
201X	Requirements								
ATIS-0700015.v002	ATIS Standard for Implementation of 3GPP Common IMS Emergency Procedures for IMS Origination and ESInet/Legacy Selective Router								

	Termination								
IETF RFC 3261	SIP: Session Initiation Protocol								
IETF RFC 3856	A Presence Event Package for the Session Initiation Protocol (SIP)								
IETF RFC 3986	Uniform Resource Identifiers (URI): Generic Syntax								
IETF RFC 5139	Revised Civic Location Format for Presence Information Data Format								
1211 10 0 0 100	Location Object (PIDF-LO)								
IETF RFC 5222	LoST: A Location-to-Service Translation Protocol (updated by RFC 6848)								
IETF RFC 5223	Discovering Location-to-Service Translation (LoST) Servers Using the								
	Dynamic Configuration Protocol (DHCP)								
IETF RFC 5246	Transport Layer Security (TLS)								
IETF RFC 5491	GEOPRIV Presence Information Data Format (PIDF-LO) Usage								
	Clarification, Considerations, and Recommendations								
IETF RFC 5985	HTTP Enabled Location Delivery (HELD)								
IETF RFC 6442	Location Conveyance for the Session Initiation Protocol								
IETF RFC 6753	A Location Dereference Protocol Using HTTP-Enabled Location Delivery								
1211 141 0 0100	(HELD)								
IETF RFC 6848	Specifying Civic Address Extensions in the Presence Information Data								
IETF RFC 0040	Format Location Object (PIDF-LO)								
IETF RFC 6881	Best Current Practice for Communications Services in Support of								
IETE DEG 7000	Emergency Calling								
IETF RFC 7090	Public Safety Answering Point (PSAP) Callback								
J-STD-110	Joint ATIS/TIA Native SMS to 911 Requirements and Architecture								
	Specification								
J-STD-110.01	Joint ATIS/TIA Implementation Guide for J-STD-110, Joint ATIS/TIA Native								
	SMS to 911 Requirements and Architecture Specification								
J-STD-110.a	Joint ATIS/TIA Supplement A to J-STD-110, Joint ATIS/TIA Native SMS to 911 Requirements and Architecture Specification								
	Security Documents								
NENA 75-001	NENA Security for Next-Generation 911 Standard (NG-SEC)								
NENA 75-502	NG-SEC Audit Checklist								
NIST FIPS 140-2	Security Requirements for Cryptographic Modules								
CJISD-ITS-DOC-08140-5.3	CJIS Security Policy								

E. COSTS

Fairfax County, on behalf of the NCR, is interested in a ROM for the ESInet. **This Rough Order of Magnitude (ROM) cost is in no way binding**. The County acknowledges that true costing is not possible based on the information provided in this RFI; however, it is important to have some understanding of costs to align funding and any grant initiatives to support implementation of the ESInet. Please provide a ROM for your solution(s). If there are variable factors that impact the cost, please describe. Any additional information you would like to provide in this area is appreciated.

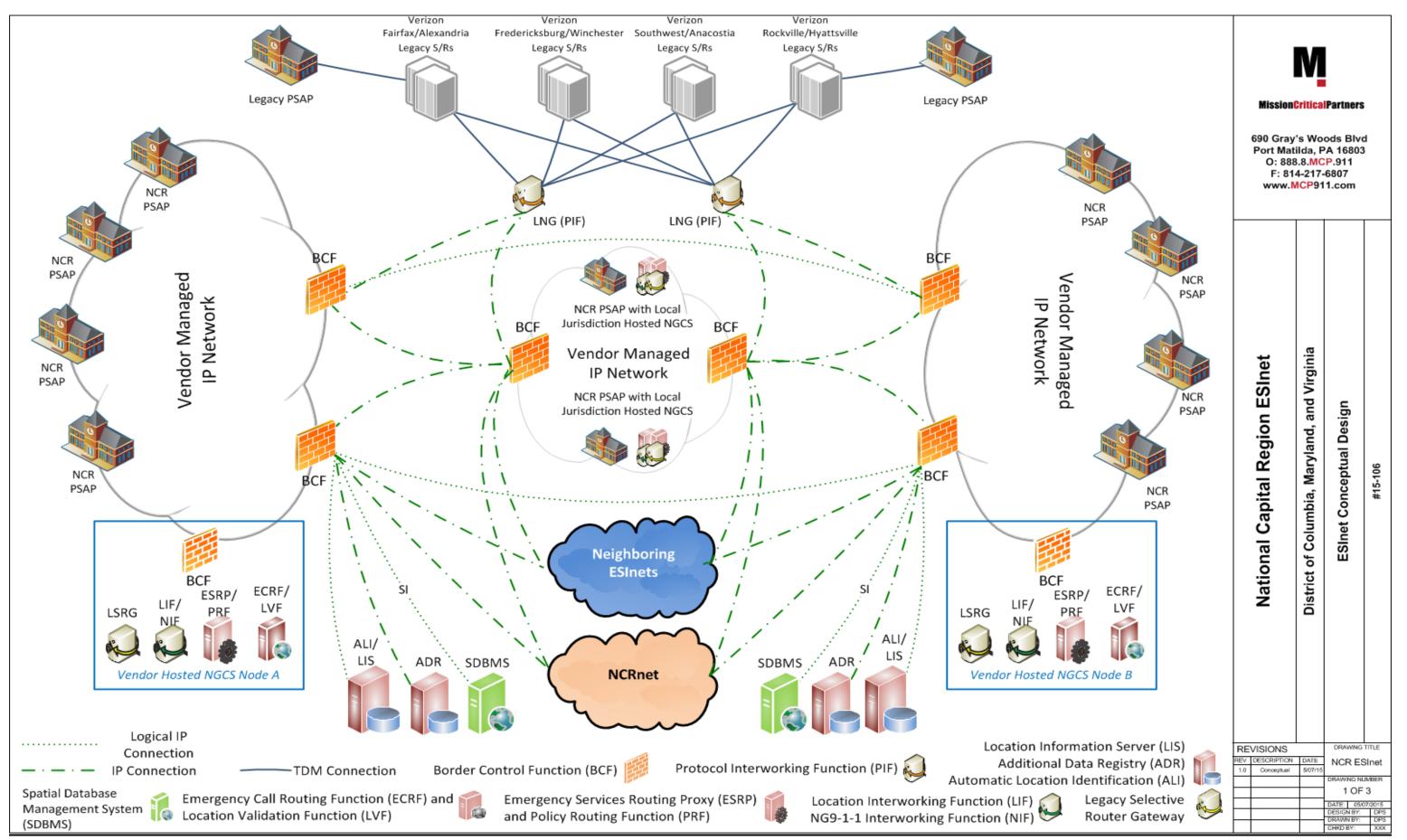
F. CONTRACT PERFORMANCES

Please provide copies of other recent procurement documents for regional or statewide i3 routing services that you believe were facilitated through an open, fair, and competitive procurement.

Please provide a copy of one or more existing contracts for i3 routing services offered by your company.

The region is interested in flexibility of terms and conditions that are specific to each of the three regions (Maryland, D.C., and Virginia); what business models do you support that provide economies of scale?

Appendix A – Conceptual Diagram



Appendix B - NCR Demographics

	PSAP	Street Address			ZIP		Population		#	Advetin	9-1-1 Call		Trunks		# of	# of Backup Workstations	SR	ALI	CPE
PSAP	Туре		City	State		NPA/NXX	2010	2014	Dispatched Calls	Admin Calls	Transfers	Wireline Wireless		Admin	# of Workstations				
Alexandria Police Department	Primary	3600 Wheeler Avenue,	Alexandria	VA	22304	703-746	139,966	148,892	72,575	246,139		12	16	30	31		Verizon Fairfax/Alexandria	Verizon Richardson/ Longmont	Airbus DS Sentinel 3.1
Alexandria PD Backup PSAP	Backup			VA			n/a	n/a								11	Verizon Fairfax/Alexandria	Verizon Richardson/ Longmont	
Arlington County Emergency Communications Center	Primary	1425 N Courthouse Road, 7 th Floor	Arlington	VA	22201	703-228	207,676	226,908	115,991	222,698	28,415	16	16	25	30		Verizon Fairfax/Alexandria	Verizon Richardson/ Longmont	Airbus DS VESTA Meridian 2.2 (SP-4)
Arlington County ECC Backup PSAP	Backup	1400 N Uhle Street, 5 th Floor	Arlington	VA	22201	703-228	n/a	n/a								13	Verizon Fairfax/Alexandria	Verizon Richardson/ Longmont	
Charles County 9-1-1 Communications Center	Primary	10425 Audie Ln	La Plata	MD	20646	301-609	146,551	154,747	35,607	138,775		4	4		16		Verizon Hyattsville/Rockville	Verizon Richardson/ Longmont	Airbus DS VESTA 2.2
Charles County 9-1-1 Communications Backup PSAP	Backup			MD			n/a	n/a								4	Verizon Hyattsville/Rockville	Verizon Richardson/ Longmont	
Washington D.C. Office of Unified Communications	Primary	2720 Martin Luther King Jr Ave SE,	Washington	D.C.	20032	202-730	601,767	658,893	1,300,000	1,200,000	7,000	96 comb	oined total	230	156		Airbus DS CML ECS-1000, located at McMillan/MLK.	Wireline: Verizon Richardson/ Longmont; Wireless: Local Airbus DS Hosted McMillan/MLK.	Airbus DS Sentinel 3.x
Washington D.C. Office of Unified Communications Backup PSAP	Backup	310 McMillan Drive, NW	Washington	D.C.	20001	202-476	n/a	n/a				96 comb	pined total	230		96	Airbus DS CML ECS-1000, located at McMillan/MLK.	Wireline: Verizon Richardson/ Longmont; Wireless: Local Airbus DS Hosted McMillan/MLK.	Airbus DS Sentinel 3.x
Fairfax County Public Safety Communications Center	Primary	4890 Alliance Drive	Fairfax	VA	22030	571-350	1,081,685	1,137,538	1,054,438	468,557	37,799	10	14	4	57		Verizon Fairfax/Alexandria	Verizon Richardson/ Longmont	PSTOC: Airbus DS Vesta 2.2, SP4 Fire dispatch: XTEND 11.9.319
Fairfax County PSCC Alternate PSAP	Backup	3900 Woodburn Road	Annandale	VA	22003	703-280	n/a	n/a								21	Verizon Fairfax/Alexandria	Verizon Richardson/ Longmont	Airbus DS Vesta 2.2, SP5
Frederick County Emergency Operations Center	Primary	110 Airport Drive East	Frederick	MD	21701	301-600	233,385	243,675							24		Verizon Hyattsville/Rockville	Verizon Richardson/ Longmont	
Frederick County Emergency Operations Center Backup PSAP	Backup			MD			n/a	n/a								14	Verizon Hyattsville/Rockville	Verizon Richardson/ Longmont	
Loudoun County 9-1-1	Primary	801 Sycolin Rd Suite 201 S.W.	Leesburg	VA	20175	703-771	312,316	363,050	28,956	82,502		16	10	8	29		Verizon Fairfax/Alexandria and Fredericksburg/ Winchester	Verizon Richardson/ Longmont	Airbus DS Sentinel 5.07_004

Appendix B – NCR Demographics

	PSAP						Popu	lation	#	Admin	9-1-1 Call		Trunks		# of	# of Backup		A1.1	CDE
PSAP	Туре	Street Address	City	State	ZIP	NPA/NXX	2010	2014	Dispatched Calls	Calls	Transfers	Wireline	Wireless	Admin	Workstations	Workstations	SR	ALI	CPE
Loudoun County 9-1-1 Backup PSAP	Backup			VA			n/a	n/a								3	Verizon Fairfax/Alexandria and Fredericksburg/ Winchester	Verizon Richardson/ Longmont	
Manassas Park Police Communications	Secondary	329 Manassas Dr	Manassas Park	VA	20111	703-361	14,273	16,149	21,974	20,925		4	0	8	3	0	Verizon Fairfax/Alexandria	Verizon Richardson/ Longmont	Airbus DS VESTA 2.6
Montgomery County Police Communications Center	Primary	1300 Quince Orchard Blvd	Gaithersburg	MD	20878	301-869	971,806	1,030,447	354,468	16,460	135,714	18	20	44	41		Verizon Hyattsville/Rockville Verizon Southwest/Anacostia	Verizon Richardson/ Longmont	Airbus DS VESTA
Montgomery County Police Communications Center Backup PSAP	Backup	2350 Research Blvd	Rockville	MD	20850	301-217	n/a	n/a				19	20			32	Verizon Hyattsville/Rockville Verizon Southwest/Anacostia	Verizon Richardson/ Longmont	Airbus DS VESTA
Metropolitan Washington Airport Authority	Primary	1 Saarinen Cir	Sterling	VA	20166	703-417	n/a	n/a							12	8	Verizon Fairfax/Alexandria	Private ALI and Verizon Richardson/ Longmont	
Prince Georges County Emergency Communications Center	Primary	17301 Melford Blvd	Bowie	MD	20715	301-333	863,519	904,430	1,367,591	1,315,108	66,031	20	16		76		Verizon Hyattsville/Rockville	Verizon Richardson/ Longmont	Airbus DS VESTA 6.0 (estimated in July 2015)
Prince Georges County Emergency Communications Center Backup PSAP	Backup			MD			n/a	n/a								45	Verizon Hyattsville/Rockville	Verizon Richardson/ Longmont	
Prince William County Public Safety Communications	Primary	3 County Complex Ct	Lake Ridge	VA	22192	703-792	401,972	446,094	381,865	482,261	216	10	10		45		Verizon Fairfax/Alexandria	Verizon Richardson/ Longmont	Airbus DS VESTA CS 2.2
Prince William County Public Safety Communications Backup PSAP	Backup	9320 Lee Avenue, Manassas, VA 20110	Manassas	VA	20110	703-368	n/a	n/a								17	Verizon Fairfax/Alexandria	Verizon Richardson/ Longmont	
Stafford County Sheriffs Communications	Primary	1225 Courthouse Road	Stafford	VA	22554	540-659	128,952	139,992	170,799	190,552	17,192	8	10	27	25		Verizon Fairfax/Alexandria and Fredericksburg/ Winchester	Verizon Richardson/ Longmont	TriTech QuickLink
Stafford County Sheriffs Communications Backup PSAP	Backup			VA			n/a	n/a								5	Verizon Fairfax/Alexandria and Fredericksburg/ Winchester	Verizon Richardson/ Longmont	
Alexandria Fire Communications	Secondary	900 2 nd St	Alexandria	VA	22314	703-746	n/a	n/a				Assume	4 or less		Assume 4 or less				
Fairfax City Police Communications	Secondary	3730 Old Lee Hwy	Fairfax	VA	22030	703-385	n/a	n/a				Assume	4 or less		Assume 4 or less				
Falls Church Police Communications	Secondary	300 Park Ave	Falls Church	VA	22046	703-248	n/a	n/a				Assume	4 or less		Assume 4 or less				
Frederick Police Department	Secondary	100 W Patrick St	Frederick	MD	21701	301-694	n/a	n/a				Assume	4 or less		Assume 4 or less				

Appendix B - NCR Demographics

	PSAP						Population		#	Admin	9-1-1 Call	Trunks			# of	# of Backup			0.7.5
PSAP	Туре	Street Address	City	State	ZIP	NPA/NXX	2010	2014	Dispatched Calls	Calls	Transfers	Wireline	Wireless	Admin	Workstations	Workstations	SR	ALI	CPE
Greenbelt Police Department	Secondary	550 Crescent Rd	Greenbelt	MD	20770	301-474	n/a	n/a				Assume	4 or less		Assume 4 or less				
Herndon Police Communications	Secondary	397 Herndon Pkwy	Herndon	VA	20170	703-435	n/a	n/a	25,013	82,502		4		3	3	2	Verizon Fairfax/Alexandria	Verizon Richardson/ Longmont	Airbus DS VESTA Pallas
Herndon Police Communications Backup	Secondary Backup	1481 Sterling Rd	Herndon	VA	20170	703-471	n/a	n/a				Assume	4 or less		Assume 4 or less				
Manassas City Police Communications	Secondary	9027 Center St	Manassas	VA	20110	703-257	n/a	n/a				Assume	4 or less		Assume 4 or less				
Maryland State Police Rockville	Secondary	7915 Montrose Rd	Rockville	MD	20854	301-424	n/a	n/a				Assume	4 or less		Assume 4 or less				
Maryland Transportation Authority	Secondary	13201 Virginia Manor Ct	Laurel	MD	20707	410-537	n/a	n/a				Assume	4 or less		Assume 4 or less				
National Institutes of Health	Secondary	6 Center Dr	Bethesda	MD	20814	301-496	n/a	n/a				Assume	4 or less		Assume 4 or less				
Takoma Park Park Police	Secondary	7500 Maple Ave	Takoma Park	MD	20912	301-270	n/a	n/a				Assume	4 or less		Assume 4 or less				
Vienna Police Communications	Secondary	215 Center St S	Vienna	VA	22180	703-255	n/a	n/a				Assume	4 or less		Assume 4 or less				
Vienna Police Communications Backup	Secondary Backup	127 Center St S	Vienna	VA	22180	703-255	n/a	n/a				Assume	4 or less		Assume 4 or less				
Washington Metropolitan Area Transit Authority	Secondary	5801 Sunnyside Ave	College Park	MD	20740	301-474	n/a	n/a				Assume	4 or less		Assume 4 or less				